



The Evolution of Sustainability and Socio-economic Functions of National Pension Systems

Inna V. Antokhonova¹, Valentina B. Briukhanova², Svetlana S. Mikhaylova^{3*}

¹East Siberia State University of Technology and Management, Ulan-Ude 670013, Russia, ²East Siberia State University of Technology and Management, Ulan-Ude 670013, Russia, ³East Siberia State University of Technology and Management, Ulan-Ude 670013, Russia. *Email: ssmihailova@mail.ru

ABSTRACT

The development of the national pension system (NPS) is connected with the coherence of the economic interests of the main participants concerning the storage, redistribution and use of premiums. The relationship and account of economic interests form the motivational core of a sustainable NPS. The evolution of the stability concept in the course of time is determined by the evolution of the system of values underlying the socio-economic functions of NPS. The study aims to develop a model of sustainable NPS that meets the social and economic criteria. Because of the complexity and dynamism of the object, a comparative analysis of pension systems in developed countries is carried out in order to identify key indicators and significant features of NPS and the definition of Russia's place. The model of a sustainable NPS is the result of the analysis and synthesis of the best world experience in solving the problem of stability. The article is of interest from the standpoint of analyzing the issues of national security.

Keywords: National Pension System, Mandatory and Voluntary Pension Insurance, Pensions, Redistribution Mechanism, Model of the Pension System

JEL Classifications: H55, G23, J32

1. INTRODUCTION

1.1. Actualizing the Problem

The pension system in the national economy of a modern state is the basic social institution, involving all institutional units. The pension system in its development have evolved from separate coverage, the most important segments for the state employees involved in activities with high risk to the spread of this institution to the entire population.

The status and development of the state pension system are influenced macro-economic and demographic factors. At the same time macro-economic conditions largely determine the level of income through the formation of the taxable base, ensuring return on pension savings, and demographic conditions - the level of expenditure of the pension system. One of the reasons of the pension system instability of the Russian Federation is

anticipated growth of spending on public pensions in comparison with the volume of production of goods and services. In 2013, the expenses of the Pension Fund of Russia for financing the payment of pensions, allowances amounted to 5671.3 billion rubles, representing 8.5% of the country's gross domestic product (GDP). The expenditure on public pensions up to 2008 amounted to 5.6% of GDP since 2009 the pension burden has significantly increased on the economy: The value of this indicator is 8-9% Organization for Economic Cooperation and Development (OECD Data).

The pension system development ensures the fulfillment of the state's most important functions of social protection with the participation of workers and employers. This function for the state is one of the main components of national security and a factor affecting the quality of life of the population as a whole.

The fact of the increasing pension burden is due to socio-political factors - the desire of the state to raise the standard of living of pensioners, as well as economic, including low GDP growth rate. In 2013, the underlying index of physical volume of GDP compared to 2008 was 105.2%, the base index of labor productivity - 107.7%. At the same time the actual size of the average pension increased in comparison with 2008 by 62.8%. Despite of the significant increase in pension costs, the recommended level of the replacement rate of lost labor income is not reached. In 2008, the replacement rate was 26.3% in 2013, the figure has reached to 33.3%. During the period 2008-2013 nominal average pension increased by 2, 4 times, the average salary by 1, 7 times.

One of the problems of the Russian economy, affecting the income of the pension system, is a high proportion of hidden economic activity. In 2013, the contribution of the informal sector of the economy in the production volume of GDP was 4.4%, the shady operations of legal entities - 6.2%, the overall contribution of unobserved economic activity was 10.6%. In 2008, the contribution of non-observed activities to GDP was 16% (Mikhaylova, 2013).

Thus, the imbalance of revenues and expenditures of the pension system is associated with accelerated growth of expenditure under the impact of rising pension liabilities of the state and with insufficient economic growth.

Recent changes in the global labor market, diversification and new gender trends in employment, the increase in life expectancy, the evolution of value system, and development of the network economy are new challenges to maintain stability in the development of national pension system (NPS).

A comparative analysis of the evolution and effectiveness of various models of country aims to highlight the economic and non-economic factors of sustainable NPC.

1.2. The Importance of the Problem

The pension system accumulates, generates and distributes cash flows, thus creating a multiplier effect investment for the economy as a whole. Performing these functions in time is based on the principle of solidarity between generations, which in itself implies the continuity and sustainability in the development of the pension system. In turn, the sustainability of the pension system of solidarity in time and space depends on the diversification of forms of pension insurance of employees and implementation of pension rights of its citizens. The formation of the pension systems in the modern history of countries that have entered into a transitional period is discussed from the viewpoint of the characteristics of their development (Cangiano et al., 1998). International experience in the development of pension systems is analyzed to assess the prospects of reform in Russia (Ermakov, 2012).

Problems of reforming the NPS are related to changes in key parameters and risk in the course of time (Barr and Diamond, 2009). For example, the problem of pension systems reforming in Eastern Europe are related to the institutional changes that are applied to the new demographic phenomenon of the population aging, high unemployment, informal employment (Croitoru,

2012; Croitoru, 2015). The effects of reforms in China, Eastern Europe are analyzed considering the trends of aging population (Holzmann, 1994). Evaluation of the consequences of the pension system reforming is supplemented by comparative analysis on the example of the eight countries in Eastern, Central and Southern Europe (Holzmann and Guven, 2009).

The characteristics and differences research in NPS includes the analysis of cultural and mental values, religious backgrounds, gender differences (Aggarwal and Goodell, 2013). It's actual to discuss pension progressivity, resulting in lower average levels of pensions and reducing social trust. The low level of trust is reflected in the development of the system of individual investment accounts as an alternative to pension insurance. In developed countries, the system of trust is backed by a perfect law and raised for decades, that contributes to the enhancement of social and economic responsibility, respectively, reduces the risk of instability NPC. It is a collective social security (Henning, 2010) and the pension system support in these countries by the majority of the population.

1.3. Approaches to the Problem of Stability of NPC

From the standpoint of national security the possibility of the gradual transition from adaptive approach to transformational approach is considered.

The interrelated approaches are considered: The system approach with a view to study the complexity of the characteristics of the object; a process one is to identify the processes and participants of storage, insurance, investment, savings, and consumption; project approach is in pension system reforming in developing economies, the rationale and the consequences of which represent a new unique challenge.

1.4. Status of the Problem

Research prospects of the development of NPS are given great attention by analysts, financiers, sociologists, demographers and other experts in various fields. In the field of research of the approach to the problem there can be identified fundamental and technical issues. Fundamentals are unified and are formulated in the framework of political economy and social orientation of the market economy. Technical aspects reflect the insurance mechanism, the problem of attracting participants in pension insurance, the stability of flows and risk reduction. The problems of life insurance and their relationship with risk of mortality and use of annuity payments are discussed by many authors (Corneo et al., 2008).

Also some attention is paid to the diversification of pension systems and the promotion of individual pension accounts (Malliaris and Malliaris, 2012).

Pension provision issues are analyzed with specification of conditions and stages of the life cycle of generations (Creedy et al., 2015).

2. HYPOTHESIS

The basic idea (hypothesis) - The development of a model of sustainable NPC in the social market economy by the transition

from the adaptive approach to transformational one based on a comparative analysis of country models of the pension system.

3. RESEARCH METHODOLOGY

Object - the NPS; subject - economic relations between institutional units regarding the accumulation, formation, distribution of funds, capitalization, investment, redistribution and use the available resources in the recipient households.

Objective: To study the sustainability of NPS in the contemporary socio-demographic and economic conditions (life expectancy increasing, high migration and labor mobility, diversification of employment, the gender gap, generational divide, new mental model forming, the development of personal insurance and personal responsibility).

3.1. A Comparative Analysis of NPS in Russia and OECD Countries

The definition of levels, the structure of the NPC, the role and contribution of entities (institutional units) NPS: The state, employers and employees (residents); isolation of active subjects of the financial market.

Principles (of social justice, economic freedom, economic responsibility, efficiency, etc.) and functions of the NPS (of Social Security, storage, insurance, capitalization, redistribution of investment, savings, management) on the subjects of the NPC.

3.2. Development of a Sustainable NPS Model as Endogenous National Security

Assessment of conditions, factors and sustainability criteria (efficiency, profitability)

Classification of risks and responsibilities of key institutional units

The identification of values and economic interests of the subjects of the NPC.

4. RESULTS

4.1. Comparative Analysis of the NPC

To assess the level of development and efficiency of the NPS a cross-country analysis of key indicators was conducted. Table 1 shows the structure of the pension system of the Russian Federation and the economically developed and developing countries in accordance with the international classification. In accordance with this classification, the pension system of the Russian Federation consists of three compulsory levels:

- State pensions, which include the social, military and state pensions
- Mandatory pension insurance, in which the insurance part of labor pensions is paid
- Cumulative pension insurance
- The pension burden on the economy is characterized by a relative indicator of the amount of the mandatory pension payments as a percentage of GDP.

The pension burden on the economy of the Russian Federation is lower than in most developed countries. In 2012, the amount of pension benefits under the state pension and mandatory pension insurance was 5.2% of GDP, which corresponds to the level of countries such as Denmark, Great Britain, Chile, Israel, Netherlands, Norway.

We note that in most developed countries paying mandatory payments are supplemented by voluntary pension insurance. A voluntary form of pension provision has received the greatest development in Switzerland (payments left 6.0% of GDP), the Netherlands (5.2%) and Great Britain (4.5%), the USA (4.3%), Canada (4.1%).

We can assume that one of the conditions of the pension system sustainability can be the development of voluntary pension insurance, allowing to reduce the pension burden on the economy of the country and to ensure a high level of pensions.

The amount of mandatory contributions to current and future pension payments in Russia is higher than the average for developed countries. Higher fees are established in Greece (33.5%), Israel (32.7%), Canada (29.8%), Slovenia (28.3%), Chile (28.0%). At the same time the burden of compulsory contributions in most countries is distributed between employers and employees, and in Russia it is fully on to employers (Mikhaylova, 2013).

The distribution of the burden of compulsory contributions for both the employer and employee can be a condition of economic and social behavior formation of employees (Bryukhanova, 2012).

In the countries where the pension system is based on the principles of accumulation or voluntary pension insurance, it is the main source of long-term investment of resources. In the countries with high culture of savings and personal insurance the amount of money have been invested by pension funds in various financial instruments, are reaching a size comparable to the GDP of the country.

The investments in pension funds exceeded the country's GDP in 2012 in the Netherlands (138.2% of GDP), Iceland (128.7%), Switzerland (110.8%). In Russia, the figure was 3.2%, that is, the storage element of the pension system currently has no appreciable impact on the market of investment resources.

The culture of saving is an indicator of the economic and social responsibility development in these countries, underlying their mental model, inherent originally due to national peculiarities (eastern) or formed in the process of improving the legal framework (western).

1. Thus, the need of the development of culture in the household savings, life insurance, pension funds of investments in financial instruments requires the analysis of the existing ones and the formation of mental models that focus on economic and social responsibility (Bryukhanova, 2012).

One of the most important conditions for development of the funded pension scheme, the pension insurance risk is the development of the national stock market, the yield of the

Table 1: Structure of the NPS (required element) in 2012, in percentage of the volume of pension payments

Countries	The first level			The second level			
	State			State		Private	
	Target	Basic	Minimal	Defined benefits	Defined contribution	Defined benefits	Defined contribution
Austria				100			
France				100			
Greece				100			
Ireland		100					
Italy				100			
New Zealand		100					
The USA				100			
Brazil		100					
Indonesia					100		
Australia	40.6						59.4
Chile	17.5						82.5
Czech republic		18.9		81.1			
Finland			2.3	97.7			
Germany	3.7			96.3			
Hungary				56.4			43.6
Israel		33.1					66.9
Japan		44.6		55.4			
South Korea		62		38			
The Netherlands		41.4				58.6	
Portugal			11.1	88.9			
Spain			0.7	99.3			
Turkey			13.2	86.8			
Argentina		20.1		79.9			
China		55			45		
India				41.1	58.9		
Canada	22.9	34.9		42.2			
Denmark	19.3	25.3					55.5
Estonia		32.2		26.7			41.1
Iceland	22.3	10.1				67.6	
Luxembourg		15.7	0.1	84.3			
Mexico		12.8	30.7				56.5
Norway			3.7	85.4			10.9
Poland			1.3	49			49.7
The Slovak Republic			0.4	47.4			52.2
Slovenia	2.9		0.8	96.3			
Sweden			5.2	51.4			43.4
Switzerland	0.2			69.3		30.5	
Russia		20.7		53.1			26.3
Great Britain	0.3	48.2	40.8	10.8			

The 2013 source: Pensions at a Glance 2012: Retirement-income systems in OECD and G20 countries - © OECD (OECD Data)

financial instruments. An important condition is the low level of inflation, which allows increasing the real value of pension savings.

The yield of pension savings, inflation, the net rate of return of pension savings in developed countries and the Russian Federation for 2012.

In 2012, there was a negative net return of pension savings in most countries with except Denmark (the value of the index was 9.4%), the Netherlands (5.9%), Australia (0.8%), Switzerland (0.4%). In Russia, the yield of pension savings was 2.0%, the highest inflation rate (8.4%) did not allow to maintain a positive growth, reducing the net return on investment of pension funds to - 6.4% (Mikhaylova, 2013). The main indicator of the social orientation of the pension system is the ratio of the average pension to the average wage in the economy (Solovyeu, 2010).

The highest rate of replacement of lost labor income by a pension under the compulsory and voluntary parts of the pension system in 2012 was in Iceland (101.1%), the

Netherlands (99.8%), Luxembourg (94.0%), the USA (93.9%). Voluntary pension insurance is developed in the United States (corresponding replacement ratio is 46.6%), the UK (43.1%), Ireland (40.7%), Canada (39.9%). In these countries, insurance is characterized by long-term evolution, which resulted in the private life insurance, pensions, property, have become integral elements of the model behavior of the population in terms of economic and social responsibility. In Russia, the replacement rate of lost labor income in the framework of the mandatory distribution level was 40.2%, within the storage level - 19.9%. It should be noted that the payment of funded pension is performed to a small number of pensioners and has no significant effect on the overall level of pensions in the country. Replacement ratio within the distribution level of the pension system corresponds to the level of developed countries, for example in Japan, it was - 39.7%, New Zealand - 41.1%, Switzerland - 38.2%, Great Britain - 37.4%.

In the study of the level of pension it is not enough to operate by the individual indicators, it is necessary to carry out a

comparative analysis of the purchasing power of pensions, the level and quality of medical care for retirees, access to social services, living conditions, and the quality and length of their lives.

Life expectancy at birth is one of the most important indicators that reflect the quality of life of the population. The steady growth in the value of the index over the past two centuries shows an increase of a person's chances of survival in each age range. At the same time the Russian Federation has one of the lowest life expectancy in comparison with developed countries and the CIS countries. Russia by indicator value is behind Belarus, Ukraine. In 2012 the life expectancy of the male population of Russia was 64.6, and the female population was 75.9. At the same time, these indicators were - 66.1 and 76.1 in Ukraine, in Belarus 66.6 and 77.7, in the USA 76.4 and 81.2, in Germany 78.6 and 83.3, in Canada - 79.3 and 83.5, in Japan - 80.0 and 86.9.

In all the countries women have a higher life expectancy, due to socio-psychological characteristics of behavior, favorable working conditions compared to male population, the biological features. The gender gap in life expectancy in Russia is critically high and amounts to 12.0 years. Comparable values are registered in the post-Soviet countries: Ukraine (10.5 years), Estonia (10.9 years), Lithuania (11.2 years), Belarus (11.9 years). In developed countries, the gender gap in life expectancy is 4-7 years.

High differences in the life expectancy of the male and female population have a negative impact on the organization of the distribution level of the pension system: There is an unfair distribution of the time pension payments in favor of the female population, while the contribution of the male population in the process of social production is higher. An additional characteristic of the quality of life of the population is an indicator of expected healthy life expectancy at birth. The index is calculated in the same way as life expectancy; factor, which reduces the number of years, is the inability to work due to various diseases. This indicator is the most informative for the purposes of the study organization of the pension system.

In Russia, the healthy life expectancy of the entire population is 60 years, including men - 55 years, women - 65 years. A comparable value of the index in the following countries: Ukraine (55 and 64), Moldova (58 and 63 years), Belarus (58 and 66 years). Healthy life expectancy of the Russian population is below the level of the developed countries of 10-15 years; for example, in the USA value of the index for the whole population is 70 years, Germany - 73 years, Switzerland - 75 years, Japan - 76 years.

Nowadays the growth of the life expectancy of the population is mistakenly perceived as one of the main reasons for increasing pension burden in developed countries, which leads to instability of the NPS. The increase in life expectancy must be accompanied by a corresponding increase in healthy life expectancy, resulting in a longer period of disability for the individual and the preservation of the labor force for the country as a whole.

The main cause of the state pension system destabilization is the deterioration of the age structure of the population,

thereby increasing demographic burden on the working older age groups, for a long time the trend of falling birth rate was maintained. In Russia, according to the data of 2012 population distribution by age groups was as follows (Figure 1).

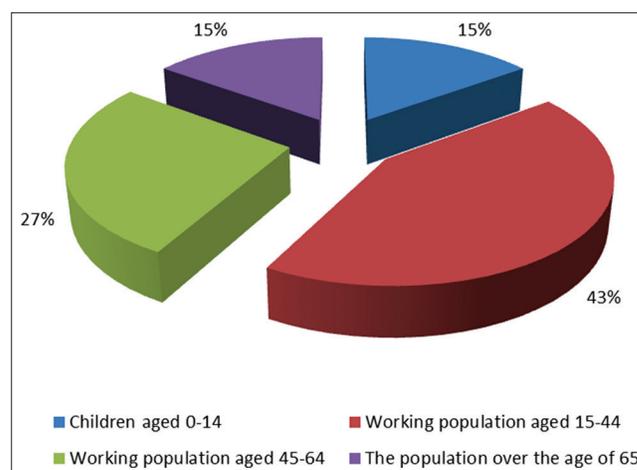
In Russia, the share of children aged 0-14 years, is of the same level as in countries such as Spain (14.3%), Switzerland (14.5%), Romania (14.7%), Estonia (14.7%). The situation in Russia is certainly better than in countries with rapidly aging populations: In Japan (the proportion of children in the general population 12.6%), Germany (12.8%), Italy (13.3%). At the same time there are countries where every fifth citizen has not reached the age of 14: Ireland (20.6%), New Zealand (19.8%), the USA (19.3%). However, this is not the highest point, there are countries where the proportion of the population under the age of 14 are even higher: In Korea (21.59%), China (25.01%), Kazakhstan (26.73%), Mongolia (32.99%).

Regarding the share of the working-age population Russia occupies a leading position, the proportion of the population aged 15-64 is 70.2%, higher than in Moldova (70.6%), Slovakia (70.9%), Korea (71.0%). The worst situation is in Japan (60.2%), France (61.6%), Sweden (61.9%), Italy (62.0%), Germany (63.0%).

- The share of the population older than 65 years in Russia is lower than in developed countries, and is 15.3%. The close value of the index is in New Zealand (15.9%), the USA (16.2%), Belarus (16.2%). Critical situation is in Sweden (22.3%), Greece (22.3%), Germany (24.2%), Italy (24.8%), Japan (27.3%). In some Asian countries, the population structure is characterized by a low share of the population over 65 - Korea (7.27%), Mongolia (7.24%), China (7.11%), Mongolia 3.88% (Mikhaylova, 2013).

At the first glance, Russia's birth rate is high enough, in 2012 the total fertility rate was 12.6%, which is higher than in most developed countries: Japan (8.0%), Germany (8.1%), Italy (9.0%), Greece (9.4%), Spain (10.2%), Switzerland (10.2%). A slightly higher birth rate is in the USA (12.7%), the UK (to 12.9%), New Zealand (to 13.9%), Australia (up 14.0%), Ireland (16.3%). The high birth rate in Russia is the result of favorable demographic structure of the population, compared with

Figure 1: Age structure of the population of the Russian Federation in 2012



developed countries. The age cohort of the population born in the 80's, entered into an active period of family formation and fertility, it is the largest one in the structure of the whole population. The fact confirms the study of the values of the total fertility rate. It is a calculated value and characterizes the average number of births per woman during her lifetime. The value of the ratio in Russia is 1.6, which is slightly different from the level of "ageing nations" (Germany, Spain, Italy and Japan where the ratio of total fertility rate is at the level of 1.4). Total fertility rate is 2.0 in the UK, Ireland, the USA, France, Sweden, and New Zealand. Thus, the high birth rate in the country is related to the favorable demographic structure of the population, the effect of payments from January 2007 annually indexed in accordance with inflation, "maternity capital," but is not a sustainable and lasting result to improve the human condition. At the same time, the aging of the population in Russia has a different character than in countries such as Japan, Italy, France, Belgium, it is associated with a low level of reproduction of the population (the total fertility rate does not provide a natural reproduction of the population).

The main parameter of the pension system is the standard retirement age. The retirement age in Russia for males is 60, the female population - 55, in most developed countries the retirement age is at 65 for the male and female population. In the USA the retirement age is 66 years of age, in Norway is 67, in Japan 70 for both sexes. Supporters of raising the retirement age in Russia operate on standard retirement age, not paying enough attention to terms of average life expectancy at birth and post-retirement pension. In Russia, the life expectancy of males after the termination of employment on the occasion of old age is 7.0 years; it is one of the lowest values among OECD countries and CIS countries; for the female population index value is 23.6 years. The longest-lived pensioners are in Greece (male population 23.6 years, female population 26.9 years), Italy (22.7 and 27.3 years), France (21.8 and 26.5 years), and Belgium (21.1 and 25.8 years).

To assess the validity of the retirement age let's analyze the ratio of maximum length of employment, which is calculated as the difference between the retirement age and lower border of working age, and life expectancy of the pensioner. The value of the index characterizes the maximum cost per year of life in retirement, calculated in the period of employment. Russian male pensioner per year spent in retirement accounts 3.2 years of employment, for women the figure is 1.7 years. The index value for the male population is one of the highest among industrialized countries such as the UK and the US: A year of retirement accounts for 3 years of working life, Norway - 3.2 years, Japan - 4 years. The lowest values are in Greece (1.8), Italy (1.9), France (2.1), Belgium (2.1), Korea (2.2).

The situation with the ratio of the maximum duration of working life and retirement for the female population looks polar way: In Russia value of the index is 1.7 years, which is at the level of Greece (1.6), Italy (1.6). For example, in the USA a year of retirement accounts for 2.5 years of working life, in Norway - 2.7 years, in Japan - 2.9 years.

From the point of view of social policy it is important to study the healthy life expectancy in retirement. Ensuring the pensioners' health by providing quality health care services,

preventive measures can significantly reduce the expenditures of the state budget for reimbursable drug coverage, health care, and save labor activity of the family members of a pensioner forced to care if they are helpless.

Healthy life expectancy of a male pensioner in Russia is 0 years, i.e. at the retirement age an average man does not have the health to continue the work. In Italy and Greece, men who have reached retirement age, have 14 years of healthy life, in France - 10.5 years, in Belgium - 10 years. Healthy life expectancy of the female population who has reached the retirement age is 10 years, which corresponds to the average level of developed countries. The longest period of healthy life female pensioners have in Belgium (14 years), in France (15.5 years), in Slovenia (16.7 years), in Greece (17 years), in Italy (17 years). The least period of healthy life in retirement is in the United States (6 years), Norway (7 years), and Japan (8 years) (Mikhaylova, 2013).

4.2. A Model of Sustainable NPC

The model of NPS is based on a comparative analysis and contains subsystems; determine the conditions, factors and criteria of sustainability of the pension system in any country (Figure 2).

Among the main participants in the NPC there is a state, state pension and private pension funds, infrastructure of NPC, insurers, pension recipients. The functions of each participant in the model of NPC are considered in conjunction with the principles and a motivational core that is one of the conditions of stability of the system.

The principles of creation and development of NPCs serve as guidance and are the same for any country. These are the principles of social justice, social and economic responsibility, economic freedom, the efficiency of the NPC, trust, solidarity between generations. Commitment to the implementation of the above principles is the quality of direct and feedback among all the participants, based on the principle of trust, which in turn allows you to optimize all the functions of the NPC.

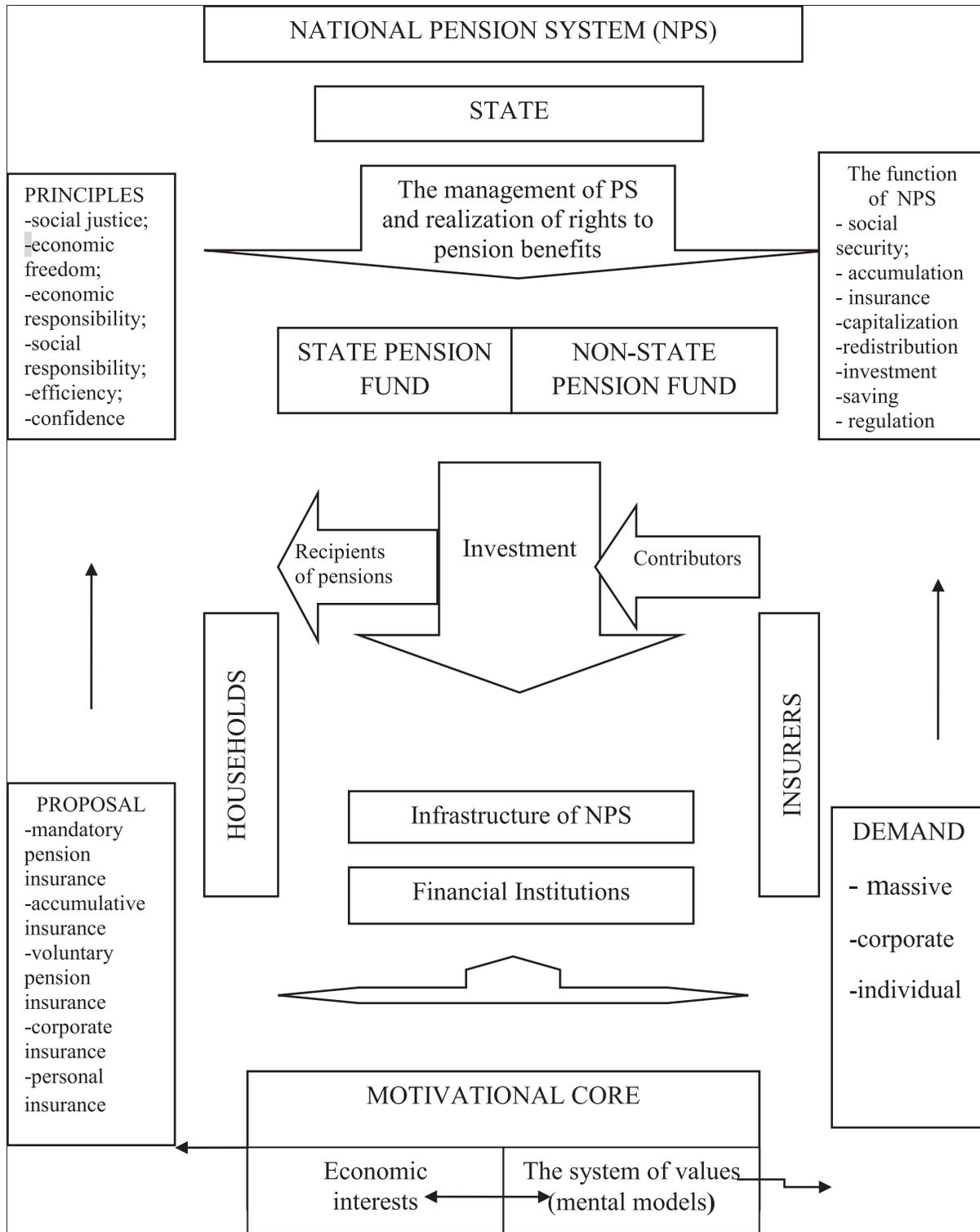
The function of social protection is based on following principle of social justice. Accumulation, insurance, redistribution, investment, savings, regulation are aimed at improving the efficiency of the NPC and the degree of economic freedom of participants, based on the principles of social and economic responsibility.

The level of social and economic responsibility in turn is formed by development of the motivational core, reflecting the close relationship of value systems (mental models) and economic interests. The above comparative analysis shows country differences of mental models and their influence on the consistency of economic interests of participants of NPS.

Krugman argued the model of "center-periphery" as a result of labor mobility and the concentration of resources in business activity centers (Krugman, 1991).

In developing economies, there is a convergence of mental models and their diversification; peculiarities of mental space in the modern world are highlighted in the article (Antokhonova, 2015).

Figure 2: The model of sustainable NPC



Thus, the level of development of motivational core, aimed at implementing the above principles can be considered as a criterion of the stability of NPC. In accordance with the selected criterion a mass, corporate, individual demand is formed which determines the necessary and sufficient conditions for increasing the stability of the NPC by expanding the scope of the voluntary offers, corporate, personal types of insurance. In turn, it requires the creation of a stable legal framework for the development of

these types of services - it is the first necessary condition for improving the stability of the NPC.

Stability of the legal framework of NPC strengthens the mental model that satisfies the principles of trust, social and economic responsibility. This is the second necessary condition for the stability of the NPC, which takes into account the impact of mental models on the economic interests of consistency.

Increasing the share of individual demand for these types of services can be seen as a sign of the resulting characterizing vector of the mental model. Full-scale development of voluntary, corporate, personal types of insurance contributes to the implementation of the principle of social justice in the form of strengthening the financial basis of the mandatory pension insurance, aimed at meeting the economic interests of vulnerable people dependent on the state and effectiveness of NPC.

The functions of the pension system of Russia are limited at the moment in the accumulation, storage and distribution of insurance funds. However, the analysis shows that the stability of NPC is largely determined by not only the efficiency function of the investment of insurance funds through the NPS infrastructure, but also the degree of social and economic responsibility of the participants NPS, the level of trust and understanding of the principle of economic freedom, the continuity of generations in respect for the fundamental principles of NPC.

5. DISCUSSION AND CONCLUSION

A comparative cross-country analysis of pension systems allows identifying the conditions, factors and criteria of sustainability of pension systems, which formed the basis for a sustainable model of NPS based on the uniqueness of each country's mental models that underlie the system of coordination of economic interests of participants of NPC. Diversification of mental models, the degree of correlation functions, motivational and core principles define conditions of NPS' stability. As a criterion for the stability of NPC the level of development of motivational core is highlighted.

An example of developed countries shows that many countries are using some kind of diversification in approaches to the formation of pensions, which includes both voluntary and mandatory types of pensions, as well as corporate, popular among the working population. Today in Russia, voluntary, corporate and individual types of pension insurance are not widespread. Their development would enhance the general welfare of the elderly population and pension replacement rate as a particular expression. The authors have tried to analyze the conditions and factors that made possible the popularization of voluntary pension insurance program in the developed countries and the relatively low interest to it in Russia. The conditions, factors and criteria for sustainable NPC are highlighted in the model.

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